

Patent claims

1. A suspension of poorly water-soluble calcium salts,
chosen from phosphates, fluorides and
fluorophosphates, in a liquid medium in which these
salts are insoluble or poorly soluble, characterized
in that the calcium salts are present in the form of
primary particles having diameters of from 5 to
50 nanometers and lengths of from 10 to
150 nanometers and are stabilized against
agglomeration by a content of at least 0.01% by
weight, based on the weight of the suspension, of a
water-soluble surfactant or of a water-soluble
polymeric protective colloid.
2. The suspension as claimed in claim 1, characterized
in that 1 to 40% by weight of the poorly soluble
calcium salts and, for the stabilization, 0.1 to 10%
by weight, based on the weight of the poorly soluble
calcium salt, of a water-soluble surfactant or of a
water-soluble polymeric protective colloid are
present in the suspension.
3. The suspension as claimed in claim 1 or 2,
characterized in that, for the stabilization,
nonionic surfactants are present in an amount of
from 1 to 10% by weight, based on the weight of the
poorly soluble calcium salt.
4. A process for the preparation of the suspension as
claimed in claim 1-3 by precipitation processes from
aqueous solutions of water-soluble calcium salts and
aqueous solutions of water-soluble phosphate or
fluoride salts, characterized in that the
precipitation is carried out in the presence of

water-soluble surfactants or water-soluble polymeric protective colloids.

5. A process for the preparation of the suspension as claimed in claim 1-3 by precipitation from an acidic solution of a water-soluble calcium salt and a stoichiometric amount of a water-soluble phosphate salt with a pH below 3 by increasing the pH using aqueous alkalis or ammonia in the presence of water-soluble surfactants or water-soluble polymeric protective colloids.
6. The use of the suspension as claimed in any of claims 1-3 as remineralizing component in compositions for the cleaning and care of teeth.
7. A toothpaste with a content of silica polishing agents, humectants, binders and aromas, characterized in that 0.1-5% by weight of fine calcium salts from the group amorphous calcium phosphate, hydroxylapatite, fluorapatite and calcium fluoride are present in the form of a suspension as claimed in claim 1-3.

6. The use of the suspension as claimed in any of
claims 1-3 as remineralizing component in
15 compositions for the cleaning and care of teeth.

7. A toothpaste with a content of silica polishing agents, humectants, binders and aromas, characterized in that 0.1-5% by weight of fine calcium salts from the group amorphous calcium phosphate, hydroxylapatite, fluorapatite and calcium fluoride are present in the form of a suspension as claimed in claim 1-3.

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